Core Outcome Indicators

The following is a list of core outcome indicators that should guide the development of your Project Assessment and Evaluation Plan (PAEP) for the State Water Board loan and grant funded projects. These core or general indicators are categorized consistent with the system used in the PAEP Outline and Performance Table.

The purpose of this core list is to provide a menu of outcome indicators that can be used to guide selection of indicators for your specific project. General review of these core indicators should help you recognize what performance measures are appropriate for quantifying the outcomes of your project activities. This is not a comprehensive list. You may find that you can use one or more of these indicators to measure performance of your activities. In some cases you will need to develop more specific indicators for your activities. For example, in one project, anthropogenic stressors and limiting factors to beneficial use recovery may be primarily due to specific pollutants, while in other projects, the stressors may be hydromodification or flow diversions. In any case, outcome indicators for the specific stressor(s) will have to be identified that enable you to compare environmental conditions before and after you implemented your project (e.g., indicators associated with pesticide toxicity or with altered flood peaks and timing, respectively).

A. Planning, Research, Monitoring, and Assessment

- 1. Number of characterized watershed land cover/land use categories
- 2. Number and magnitude of anthropogenic stressors identified (including extent of hydromodification; known and suspected pollution source categories)
- 3. Peer-reviewed and adopted watershed assessment report or watershed management plan
- 4. Peer-reviewed and adopted Monitoring Plan for TMDL implementation
- 5. Peer-reviewed and adopted Restoration Plan for beneficial use recovery
- 6. Adopted list of watershed-specific BMPs and restoration practices
- 7. Adopted conceptual models outlining hypothesized cause-effect relationships
- 8. Peer-reviewed and adopted limiting factors analysis
- 9. Peer reviewed and adopted source analysis
- 10. Adopted analytical methods, bioassays, or tests

B. Education, Outreach, and Capacity-building

- 1. % increase in community awareness
- 2. % increase in community participation in watershed stewardship activities
- 3. % increase in local government expertise, resources, and management tools (e.g. GIS capacity; SOPs; public-private partnership agreements; sustained funding sources for watershed health maintenance; building codes aligned with watershed goals, etc.)
- 4. % increase in landowners trained and certified in BMP implementation

C. Habitat Restoration

1. % increase in native habitat extent

- 2. % decrease in invasive species cover
- 3. Improvement in habitat condition or other biometric scores (e.g. CRAM, IBI)
- 4. % increase in sustained habitat maintenance and management agreements
- 5. % increase in watershed functions and processes resembling reference conditions

D. Load Reduction

- 1. % decrease in pollutant use and/or discharge
- 2. % increase in certified practices designed to result in reduction of pollutant inputs into listed water bodies
- 3. % increase in benthic macroinvertebrate diversity
- 4. % decrease in adverse effects biomarkers and targeted toxic samples (event-based water toxicity; sediment toxicity)

E. Beneficial Use Improvement and Protection

- 1. Value added to expenditures for public infrastructure where flood management and land use activities have been integrated.
- 2. % increase in volume of safe new drinking water supply
- 3. % increase in water supply reliability
- 4. % increase in recycled water use
- 5. Improvements in efficiency of water recycling capacity
- 6. % increase in volume of water available for environmental enhancement
- 7. % increase in restored watershed hydrologic processes compared to historic reference conditions
- 8. % decrease in acre-feet lost via accelerated runoff due to increases in drainage density and impervious area in the watershed
- 9. % reduction of subsidence due to overdraft mitigation
- 10. % increase in water use efficiency